PEACE/WILLISTON
FISH & WILDLIFE
COMPENSATION
PROGRAM

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Wildlife Program
Annual Report, 1990/91

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1991

PWFWCP Report No. 11

105-00939/

The Peace/Williston Fish & Wildlife Compensation Program is a cooperative venture of BC Hydro and the provincial fish and wildlife management agencies, supported by funding from BC Hydro. The Program was established to enhance and protect fish and wildlife resources affected by the construction of the W.A.C. Bennett and Peace Canyon dams on the Peace River, and the subsequent creation of the Williston and Dinosaur Reservoirs.

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This report has been approved by the Peace/Williston Fish and Wildlife Compensation Program Fish Technical Committee.

Citation: R. Dawson and M. D. Wood. 1991. Wildlife Program Annual Report, 1990/91. Peace/Williston Fish and Wildlife Compensation Program, Report No. 11. 5pp.

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WILLISTON WILDLIFE COMPENSATION PROGRAM
1990/91 ANNUAL REPORT

INTRODUCTION

The 1990/91 fiscal year was the first full year of work on the Williston Wildlife Compensation Program. Projects included habitat enhancement, animal transplants, public consultation in several forms, assessment of available habitats and biological limiting factors and the production of planning documents to guide future work. The program employed two full time biologists: one out of Prince George for the full year and one out of Ft. St. John for nine months. Additional personnel were contracted for work on specific projects.

Many of the Compensation projects are cooperative efforts which give the compensation program a higher profile while allowing more to be done with the resources provided by the compensation fund. The fund and the staff hired by the fund are, in effect, acting as a catalyst resulting in a higher level of wildlife management activity in the Williston watershed. The lack of a second program biologist through the busy winter period was very noticeable and resulted in several project delays and cancellation of the Spring 1991 burning program on the Peace Arm.

PUBLIC CONSULTATION

A large program like this cannot be carried out in isolation from other public and commercial resource users and government land management agencies. A large commitment of program staff time is being made to collect and integrate public input into the program plans and to conduct cooperative projects with other resource users and managers.

Formal public consultation efforts included day long public workshops in Mackenzie and Hudson's Hope. Delegates attended from a wide variety of interest groups. They were given information on the general nature of the compensation program and a brief review of the strategic plan for both wildlife and fish. Participants input was solicited and gathered in a number of ways including: small discussion groups, open sessions and questionnaires. Dave Read, from B.C. Hydro, is preparing a report on participant input and issues raised. The technical committee and project biologists will respond to these in the Fall issue of the Natureline and take these into account in designing ongoing projects.

Less formal contacts were made through public presentations, and meetings, both in the field and in the office, with interested groups and individuals. These groups include:

- Ingenika Indian Band
- Peace Williston Advisory Committee
- North Peace Naturalist Club
- Mackenzie Forest Management Group
- North Peace Rod and Game Club
- Guide/Outfitters
- Ministry of Forests
- Ministry of Environment

Public information was also provided by the local media through news articles written by project staff and one radio interview with the project biologist. Project staff also provided material and editing for the Natureline publication.

PROGRAM PLANNING

Strategic Plan

A draft Wildlife Compensation Management Plan was written outlining proposed long-term goals and strategies for the Wildlife Compensation Program. The plan provides background information, goals and strategies for all major wildlife species or groups. The plan was sent to members of the Steering and Technical Committees. In addition, it was presented to all participants in the public consultation workshops and was used as the basis for discussion at the workshops.

ENHANCEMENT, PROTECTION AND INTEGRATED MANAGEMENT PROJECTS

Peace Enhancement Burning

Plans were developed for 3,000 ha of ungulate winter ranges adjacent to the north shore of Peace Arm. Prescribed burns totalling 1580 ha were conducted between Adams Creek and Dunlevy Inlet in May, 1990. Poor weather hindered further burning. These burns successfully met the habitat enhancement objectives with no control problems. Detailed planning for the 1991 Spring season was curtailed due to the lack of adequate program staff over the winter.

Finlay Enhancement Burning

Pre-burn planning was done in conjunction with the Ministry of Forests for eight burns totalling 1700 ha on the lower Finlay Arm. Because of poor burning conditions, only one burn with an area of 110 ha was attempted. Although only a small area was treated, local experience was gained, required equipment was purchased and a good working relationship was developed with the Forest Service in Mackenzie.

Burn Plan - Finlay

A strategic burning plan for the northeast Finlay and Ingenika areas was completed. Aerial reconnaissance flights to select, priorize and plan prescribed burning on specific sites to enhance ungulate winter range were conducted on areas adjacent to the Finlay Arm. The local guide-outfitter, and representatives from the Forest Service and the Ingenika Indian Band were included so that their input could be incorporated in the plan.

Detailed planning for several burns on the Finlay in spring of 1991 was completed.

Parsnip Moose Forage Enhancement Project Inventory

The first draft of a report evaluating potential moose winter forage enhancement projects in the East Parsnip Arm and Omineca areas was completed. The report will be used to help set project priorities.

Enhancement burn Monitoring

Vegetation monitoring using standard methods described for the HABITAT CONSERVATION FUND was completed on four sites. Two were on sites burned in Spring of 1990. The other two were pre-burn assessments.

Sheep Transplant

Sixteen Stone sheep (13 ewes and 3 rams) were translocated from the North side of the Peace Arm to Mount Montieth in mid-March 1991 to augment last years translocation of 8 sheep to the same general area. Unfortunately, three of these 24 animals died; one on transit and two soon after being moved. The transplanted herd is being monitored by the regular radio-tracking of 4 radio collared sheep in the transplant herd and 4 sheep from the source herd. The monitoring will help delineate habitat preferences and identify potential habitat for enhancement and protection.

Cavity nester habitat project

A pilot project to develop, test and monitor an alternate forest harvesting technique to maintain and create snag habitat for cavity nesting birds and small mammals has been initiated. Harvesting has been delayed because of changes in logging plans resulting from the poor timber market conditions. Hopefully at least three blocks will be logged in 1991 so that monitoring can begin in Spring of 1992. A draft working plan for the monitoring has been completed. This project is being done in cooperation with Fletcher Challenge and Finlay Forest Industries in Mackenzie. If successful, it will provide an important tool to maintain bio-diversity in managed forest stands in the Williston area.

Wetland Projects

A pilot project to create wetland habitat for waterfowl by blasting was carried out in October, 1990 on two sites close to the Mischinsinlika River south of Mackenzie. Two potholes were blasted on the upper Williston foreshore. These will be monitored for water retention during the spring and summer of 1991 and the program continued in this area if results are favourable. In addition, four potholes were blasted, using various techniques, in a marshy area that had no open water. These will also be monitored for water retention, vegetation development and waterfowl use.

INVENTORY AND HABITAT RELATIONSHIPS

Snow Depth Mapping

A preliminary map of relative winter snow depths in the Finlay, Parsnip and Peace drainages was completed using the network of snow depth measurements collected in February 1990. This map will aid in the determination of ungulate winter capability and the location of potential sites for winter range enhancement projects where snowpack is favourable.

Furbearer Literature Survey

Literature relevant to the to the ecology, protection and enhancement of the pine marten has been compiled and summarized in a brief report.

Elk Habitat Use

Five female elk were captured on the north side of the Peace Arm in the winter of 1991 and fitted with radio-collars. Three were from a herd of 150 elk located at the site of a habitat enhancement burn carried out through the compensation fund in the spring of 1990. Two of the captured elk possessed ear tags from the original 1985/6 Kootenay elk transplant.

Wildlife Capability Mapping

Two habitat mapping projects were initiated:

1. A wildlife habitat and capability map for the Dunlevey property purchased through the Compensation Fund was completed.

2. Winter and summer fieldwork required for the detailed mapping of wildlife habitats in the Ospika Valley was completed. The mapping, which is a cooperative project involving Fletcher Challenge, the Habitat Inventory Section of the Ministry of Environment and the Compensation program will result in better integrated planning, habitat protection and enhancement for wildlife in the Ospika valley. The final compilation of the 1:50,000 scale maps will be completed by Fletcher Challenge in the Fall of 1991.

Inventory - South Peace

An ungulate reconnaissance inventory of 3040 square kilometres on the south side of the Peace Arm was completed by contract in February. Information was gathered on winter ungulate distribution and habitat use, and enhancement opportunities were identified. Snow depths were also measured. A report was completed.

Reconnaissance Inventory - Finlay/Parsnip

A large area in the Finlay and Parsnip drainages was inventoried this winter as a result of a cooperative effort between the Compensation Program and the Habitat Inventory Section of the Ministry of Environment.

The Habitat Inventory Section supplied $40,000 for helicopter rental and 24 man-days of biologists' time in the field. This cooperative effort resulted in approximately 15,000 square kilometres of area surveyed and accelerated the progress towards completing a reconnaissance level inventory of the entire watershed. The drafting of finished maps will be completed by the Habitat Inventory Section in 1991.

Caribou Habitat Selection

Twenty caribou (16 females and 4 males) were captured and radio-collared on the west side of Williston Lake between Germansen Lake and the Ingenika River in February 1991. Rob Woods, a wildlife capture expert from MOE Fort St. John, and Dr. Bruce Mclellan from the Forest Service Research Section helped with the animal capture along with program staff. The Forest Service is also providing a small amount of funding. Caribou will be monitored over the next three years to identify important seasonal habitats, migration routes, winter diet and mortality rate. To the end of April, the caribou remained concentrated in two wintering habitats: alpine ridges and Lodgepole pine flats. In May they dispersed widely as the females moved to calving areas.

Ungulate Diet Analysis

Pellet collections from sheep, elk, deer and caribou were made over the winter. Food habitat analysres will be conducted at the University of Washington in the winter of 1991.